

03/16/01
JC860 U.S. PTO

NONPROVISIONAL PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400
Facsimile: (703) 836-2787

Attorney Docket No.: 108964

Date: March 16, 2001

BOX PATENT APPLICATION

Customer Number: 25944

NONPROVISIONAL APPLICATION TRANSMITTAL
RULE §1.53(b)

Director of the U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

Transmitted herewith for filing under 37 C.F.R. §1.53(b) is the nonprovisional patent application

For (Title): MAGNETORESISTIVE ELEMENT SUBSTRUCTURE, MAGNETORESISTIVE
ELEMENT AND MICRO DEVICE, AND METHODS OF MANUFACTURING SAME

By (Inventors): Kazuki SATO, Noriaki KASAHARA and Koji SHIMAZAWA

- ☒ Formal drawings (Figs. 1A-33B; 18 sheets) are attached.
☐ Use Figure _____ for front page of Publication.
☐ A Declaration and Power of Attorney is filed herewith.
☐ An assignment of the invention to TDK CORPORATION is filed herewith.
☐ An Information Disclosure Statement is filed herewith.
☐ Entitlement to small entity status is hereby asserted.
☐ A Preliminary Amendment is filed herewith.
☐ Please amend the specification by inserting before the first line the sentence --This nonprovisional application claims the benefit of U.S. Provisional Application No. _____, filed _____,--
☒ Priority of foreign application No. 2000-077954 filed March 21, 2000 in JAPAN is claimed (35 U.S.C. §119).
☒ A certified copy of the above corresponding foreign application is filed herewith.
☐ This application is NOT to be published under 35 U.S.C. 112(b). The undersigned attorney or agent hereby certifies that the invention disclosed in this application has not been and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.
☒ The filing fee is calculated below:

**CLAIMS IN THE APPLICATION AFTER ENTRY OF
ANY PRELIMINARY AMENDMENT NOTED ABOVE**

FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	25 - 20	= 5
INDEP CLAIMS	6 - 3	= 3
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS PRESENTED		

* If the difference is less than zero, enter "0".

SMALL ENTITY

RATE	FEE
	\$ 355
x 9 =	\$
x 40 =	\$
+ 135 =	\$
TOTAL	\$

OR

OR

OR

OR

OR

OR

**OTHER THAN A
SMALL ENTITY**

RATE	FEE
	\$ 710
x 18	\$ 90
x 80	\$ 240
+ 270	\$
TOTAL	\$ 1040

- ☒ Check No. 117196 in the amount of \$1,040.00 to cover the filing fee is attached. Except as otherwise noted herein, the Director is hereby authorized to charge any other fees that may be required to complete this filing, or to credit any overpayment, to Deposit Account No. 15-0461. Two duplicate copies of this sheet are attached.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Joel S. Armstrong
Registration No. 36,430

JAO:JSA/zmc

NONPROVISIONAL PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400
Facsimile: (703) 836-2787

Attorney Docket No.: 108964

Date: March 16, 2001

BOX PATENT APPLICATION

Customer Number: 25944

**NONPROVISIONAL APPLICATION TRANSMITTAL
 RULE §1.53(b)**

Director of the U.S. Patent and Trademark Office
 Washington, D.C. 20231

Sir:

Transmitted herewith for filing under 37 C.F.R. §1.53(b) is the nonprovisional patent application

For (Title): MAGNETORESISTIVE ELEMENT SUBSTRUCTURE, MAGNETORESISTIVE
 ELEMENT AND MICRO DEVICE, AND METHODS OF MANUFACTURING SAME

By (Inventors): Kazuki SATO, Noriaki KASAHARA and Koji SHIMAZAWA

- ☒ Formal drawings (Figs. 1A-33B; 18 sheets) are attached.
☐ Use Figure _____ for front page of Publication.
☐ A Declaration and Power of Attorney is filed herewith.
☐ An assignment of the invention to TDK CORPORATION is filed herewith.
☐ An Information Disclosure Statement is filed herewith.
☐ Entitlement to small entity status is hereby asserted.
☐ A Preliminary Amendment is filed herewith.
☐ Please amend the specification by inserting before the first line the sentence --This nonprovisional application claims the benefit of U.S. Provisional Application No. _____, filed _____.--
☒ Priority of foreign application No. 2000-077954 filed March 21, 2000 in JAPAN is claimed (35 U.S.C. §119).
☒ A certified copy of the above corresponding foreign application is filed herewith.
☐ This application is NOT to be published under 35 U.S.C. 112(b). The undersigned attorney or agent hereby certifies that the invention disclosed in this application has not been and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.
☒ The filing fee is calculated below:

**CLAIMS IN THE APPLICATION AFTER ENTRY OF
 ANY PRELIMINARY AMENDMENT NOTED ABOVE**

FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	25 - 20	= 5
INDEP CLAIMS	6 - 3	= 3
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS PRESENTED		

* If the difference is less than zero, enter "0".

SMALL ENTITY

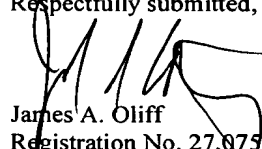
RATE	FEE
	\$ 355
x 9 =	\$
x 40 =	\$
+ 135 =	\$
TOTAL	\$

**OTHER THAN A
 SMALL ENTITY**

RATE	FEE
	\$ 710
x 18	\$ 90
x 80	\$ 240
+ 270	\$
TOTAL	\$ 1040

- ☒ Check No. 117196 in the amount of \$1,040.00 to cover the filing fee is attached. Except as otherwise noted herein, the Director is hereby authorized to charge any other fees that may be required to complete this filing, or to credit any overpayment, to Deposit Account No. 15-0461. Two duplicate copies of this sheet are attached.

Respectfully submitted,


 James A. Oliff
 Registration No. 27,875

Joel S. Armstrong
 Registration No. 36,430

NONPROVISIONAL PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400
Facsimile: (703) 836-2787

Attorney Docket No.: 108964

Date: March 16, 2001

BOX PATENT APPLICATION

Customer Number: 25944

**NONPROVISIONAL APPLICATION TRANSMITTAL
RULE §1.53(b)**

Director of the U.S. Patent and Trademark Office
Washington, D.C. 20231

Sir:

Transmitted herewith for filing under 37 C.F.R. §1.53(b) is the nonprovisional patent application

For (Title): MAGNETORESISTIVE ELEMENT SUBSTRUCTURE, MAGNETORESISTIVE
ELEMENT AND MICRO DEVICE, AND METHODS OF MANUFACTURING SAME

By (Inventors): Kazuki SATO, Noriaki KASAHARA and Koji SHIMAZAWA

- ☒ Formal drawings (Figs. 1A-33B; 18 sheets) are attached.
☐ Use Figure _____ for front page of Publication.
☐ A Declaration and Power of Attorney is filed herewith.
☐ An assignment of the invention to TDK CORPORATION is filed herewith.
☐ An Information Disclosure Statement is filed herewith.
☐ Entitlement to small entity status is hereby asserted.
☐ A Preliminary Amendment is filed herewith.
☐ Please amend the specification by inserting before the first line the sentence --This nonprovisional application claims the benefit of U.S. Provisional Application No. _____, filed _____.--
☒ Priority of foreign application No. 2000-077954 filed March 21, 2000 in JAPAN is claimed (35 U.S.C. §119).
☒ A certified copy of the above corresponding foreign application is filed herewith.
☐ This application is NOT to be published under 35 U.S.C. 112(b). The undersigned attorney or agent hereby certifies that the invention disclosed in this application has not been and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.
☒ The filing fee is calculated below:

**CLAIMS IN THE APPLICATION AFTER ENTRY OF
ANY PRELIMINARY AMENDMENT NOTED ABOVE**

FOR:	NO. FILED	NO. EXTRA
BASIC FEE		
TOTAL CLAIMS	25 - 20	= 5
INDEP CLAIMS	6 - 3	= 3
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS PRESENTED		

* If the difference is less than zero, enter "0".

SMALL ENTITY

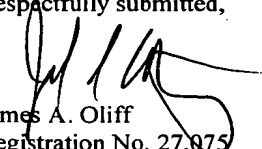
RATE	FEE
	\$ 355
x 9 =	\$
x 40 =	\$
+ 135 =	\$
TOTAL	\$

**OTHER THAN A
SMALL ENTITY**

RATE	FEE
	\$ 710
x 18	\$ 90
x 80	\$ 240
+ 270	\$
TOTAL	\$ 1040

- ☒ Check No. 117196 in the amount of \$1,040.00 to cover the filing fee is attached. Except as otherwise noted herein, the Director is hereby authorized to charge any other fees that may be required to complete this filing, or to credit any overpayment, to Deposit Account No. 15-0461. Two duplicate copies of this sheet are attached.

Respectfully submitted,


James A. Oliff
Registration No. 27,875

Joel S. Armstrong
Registration No. 36,430

